

**REMARKS**

Claims 1 through 4, 7 through 35, 37, 38, 39, and 45 through 51 are pending. Claim 6 is currently canceled. Claims 1, 25, 26, 48, 49, and 50 are currently amended. Claim 51 has been added. Support for the amendment to claim 1 may be found, for example, at page 3, lines 14-15 of the specification. Support for the amendment to claim 25 may be found, for example, at page 3, line 33 through page 4, lines 1-3, page 5, lines 1-2, and original claim 11. Support for the amendment to claim 26 may be found, for example, at page 3, line 33 through page 4, lines 1-3, page 5, lines 1-2, and original claim 26. Support for new claim 51 may be found, for example, at page 3, line 3 through page 4, lines 1-3 and the combination of current claim 1 and original claim 11.

Reconsideration of the application is requested.

**§ 112 Rejections**

Claims 25 and 26 are rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. A finding of insufficient antecedent basis for the limitation “the article impregnated with” was indicated in the Office Action. Claim 25 has been amended to remove the expression “impregnated with sparingly soluble silver-containing compound”, and claim 26 has been amended to remove the expression “impregnated with silver oxide”. Also, in claim 25, the term “ammonium compounds” has been amended to “ammonium-containing compound”, thereby using the same term as in claim 1.

Accordingly, Applicants respectfully request that the rejection of claims 25 and 26 under 35 USC § 112, second paragraph, be withdrawn.

**§ 102 Rejections**

Claims 1-4, 9-14, 25, 45, 46, 48-50 are rejected under 35 USC § 102(b) as being anticipated by Davis et al. (US 2,813,059).

Without acquiescing to the Examiner’s arguments, the above indicated claim amendments, made in the interest of progressing prosecution, render this rejection moot. Insofar

as they apply to the presently pending claims, these rejections are respectfully traversed, at least for the following reasons.

Davis et al. lacks at least the following elements of the present claims:

- 1) providing a sparingly soluble silver-containing compound wherein the sparingly soluble silver-containing compound is silver oxide;
- 2) providing an ammonium-containing compound; and combining the silver oxide with the ammonium-containing compound to form an aqueous solution prior to coating on a substrate.

The only water soluble basic nitrogen compounds actually reported by Davis et al. for forming a clear, aqueous solution with a silver salt are ammonia and water soluble aliphatic amines. (See col. 3, lines 74-75.) These are not ammonium-containing compounds as required in the present claims. Examples of ammonium-containing compounds are found at page 3, lines 17-21 of the present specification.

Accordingly, the rejection of claims 1-4, 9-14, 25, 45, 46, 48-50 under 35 USC § 102(b) as being anticipated by Davis et al. has been overcome at least for these reasons, and Applicants respectfully request that this rejection be withdrawn. The same reasons would apply to new independent claim 51, since this includes all of the limitations of claims 1 and 11.

### **§ 103 Rejections**

Claims 6, 27-30, 33-35 are rejected under 35 USC § 103(a) as being unpatentable over Davis et al. (US 2,813,059) in view of Murtfeldt (US 4,592,920).

Applicants respectfully traverse this rejection.

The combination of Davis et al. and Murtfeldt fails cure the deficiencies of Davis et al.

Murtfeldt uses a comminuted antimicrobial metal compound at a particle size of up to about 30 microns in diameter. (See Abstract.) No solution of the metal compound is formed. Combining Murtfeldt with Davis et al. would destroy the function of Davis et al. to deposit the desired silver compound from a solution with proper control of conditions. (See Davis et al. at col. 2, lines 56 to col. 3, line 1; col. 3, lines 40-48.)

The Office Action alleges that biocompatibility of silver oxide would motivate the person of ordinary skill in the art to replace the silver salt of Davis et al. with silver oxide. However, Murtfeldt does not show that silver oxide is any more biocompatible than other silver

compounds. Murtfeldt states that any compound or composition of the antimicrobial metal which provides a solid material can be utilized in the practice of the method herein. (See col. 3, lines 24-30.) Any preference for silver oxide in Murtfeldt is, instead, related to it being readily comminuted to the desired particle sizes. (See column 1, lines 50-54.) Therefore, the Office Action has not provided a sufficient reason as to why the disclosures of Davis et al. and Murtfeldt should be combined. Moreover, one of ordinary skill in the art having common sense at the time of the invention would not have reasonably looked to Murtfeldt to solve a problem already solved by Davis et al. However, even if motivated to try silver oxide, Murtfeldt in combination with Davis et al. does not provide a reasonable expectation of success to form an aqueous solution by combining silver oxide and an ammonium-containing compound. As discussed above, Davis et al. does not teach or suggest forming an aqueous solution by combining a silver compound with an ammonium-containing compound, and Murtfeldt does not teach or suggest any aqueous solution of a silver compound.

In summary, Davis et al. (US 2,813,059) in view of Murtfeldt (US 4,592,920) fails to provide a reasonable motivation to combine, fails to provide a reasonable expectation of success, and lacks all of the elements of the presently claimed method as discussed above. Accordingly, a *prima facie* case of obviousness has not been established at least for these reasons, and Applicants respectfully request that the rejection of claims 6, 27-30, 33-35 under 35 USC § 103(a) as being unpatentable over Davis et al. (US 2,813,059) in view of Murtfeldt (US 4,592,920) be withdrawn.

Claims 7, 8, and 38 are rejected under 35 USC § 103(a) as being unpatentable over Davis et al. (US 2,813,059) in view of WO 02/43743.

Without acquiescing to the Examiner's arguments, the above indicated claim amendments, made in the interest of progressing prosecution, render this rejection moot. Insofar as they apply to the presently pending claims, these rejections are respectfully traversed, at least for the following reasons.

Combining WO 02/43743 with Davis et al. does not correct the deficiencies of Davis et al. as noted above.

In WO 02/43743, a solution is prepared comprising an organic solvent and a source of silver. (See page 5, lines 19-20.) Water can be used, especially for the purpose of initial solubilization of silver before addition of the silver to the organic solvent. (See page 6, lines 15-16.) WO 02/43743 fails to teach or suggest combining a sparingly soluble silver-containing compound with an ammonium-containing compound to form an aqueous solution prior to coating on a substrate. As discussed above, Davis et al. does not use an ammonium-containing compound to form a silver oxide aqueous solution or to dissolve any silver compound in water. Therefore, the combination of WO 02/43743 with Davis et al. fails to provide a motivation for one of ordinary skill in the art to use ammonium carbonate other than in the manner it is used in WO 02/43743. Accordingly, the Office Action has not provided a sufficient reason as to why the disclosures of Davis et al. and WO 02/43743 should be combined. Moreover, one of ordinary skill in the art having common sense at the time of the invention would not have reasonably looked to WO 02/43743 to solve a problem already solved by Davis et al. (See Davis et al. at column 2, lines 64-69.) However, even if motivated to try ammonium carbonate to dissolve silver oxide, WO 02/43743 in combination with Davis et al. does not provide a reasonable expectation of success to form an aqueous solution by combining silver oxide and ammonium carbonate.

In summary, Davis et al. (US 2,813,059) in view of WO 02/43743 fails to provide a reasonable motivation to combine, fails to provide a reasonable expectation of success, and lacks all of the elements of the presently claimed method as discussed above. Accordingly, a *prima facie* case of obviousness has not been established at least for these reasons, and Applicants respectfully request that the rejection of claims 7, 8, and 38 under 35 USC § 103(a) as being unpatentable over Davis et al. (US 2,813,059) in view of WO 02/43743 be withdrawn.

Claims 15-24, 26, 31, 32, 38, 39, and 47 are rejected under 35 USC § 103(a) as being unpatentable over Davis et al. (US 2,813,059) in view of Murtfeldt (US 4,592,920) and further in view of WO 02/43743.

Applicants respectfully traverse this rejection.

Combining WO 02/43743 with Davis et al. and Murtfeldt does not cure the deficiencies of the combination of Davis et al. and Murtfeldt noted above. At least the same reasons given

above with respect to claims 7, 8, and 38 apply here. As a result, Davis et al. in view of Murtfeldt and further in view of WO 02/43743 fails to provide a reasonable motivation to combine, fails to provide a reasonable expectation of success, and lacks all of the elements of the presently claimed method for at least the reasons discussed above. Accordingly, a *prima facie* case of obviousness has not been established, and Applicants respectfully request that the rejection of claims 15-24, 26, 31, 32, 38, 39, and 47 under 35 USC § 103(a) as being unpatentable over Davis et al. (US 2,813,059) in view of Murtfeldt (US 4,592,920) and further in view of WO 02/43743 be withdrawn.

**Double Patenting Rejection**

Claims 1-4, 6-35, 37-39 and 45-50 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-51 of copending Application No. 10/917,002, and over claims 21-30 of copending Application No. 10/917,102. Upon an indication of otherwise allowable subject matter and in the event these rejections are maintained, Applicants will provide an appropriate response.

In view of the above, it is respectfully submitted that the pending claims 1 through 4, 7 through 35, 37, 38, 39, and 45 through 51 are in condition for allowance, and notification to that effect is respectfully requested. The Examiner is invited to contact Applicants' agent at the telephone number listed below if it is believed that prosecution of this application may be assisted thereby in any way.

Examination and reconsideration of the application as amended is requested.

Respectfully submitted,

9 June 2010

Date

By: \_\_\_\_\_ /Dean A. Ersfeld/

Dean A. Ersfeld, Reg. No.: 46,689  
Telephone No.: 651-733-7830

Office of Intellectual Property Counsel  
3M Innovative Properties Company  
Facsimile No.: 651-736-3833